

**Transformation of Britannia into England
Common Law Evolution**

Bernhard Bierschenk

2021

No. 158



**Copenhagen University
Denmark**



**Lund University
Sweden**

**KOGNITIONSVETENSKAPLIG
FORSKNING**

Cognitive Science Research

ISSN 0281-9864

**Transformation of Britannia into England
Common Law Evolution**

Bernhard Bierschenk

2021

No. 158

Cognitive Science Research

Lund University
University of Copenhagen

Editorial board

Bernhard Bierschenk (editor), Lund University
Inger Bierschenk (co-editor), University of Copenhagen
Ole Elstrup Rasmussen, University of Copenhagen
Helge Helmersson (adm. editor), Lund University
Jørgen Aage Jensen, Danish University of Education

Cognitive Science Research

Copenhagen Competence
Research Center
University of Copenhagen
Njalsgade 88
DK-2300 Copenhagen S
Denmark

Adm. editor

Helge Helmersson
Dep. of Business Adm.
Lund University
P.O. Box 7080
S-220 07 Lund
Sweden

Transformation of Britannia into England

Bernhard Bierschenk

Abstract The significance of real time imaging of string rotation and grapheme production resides not in the physical reality of a produced grapheme, but in the hypotheticalal fraction or share, related to a string of graphemes. It follows that common law evolution must mediate intention through an exchange of virtual properties within flow fields. Since a flow field itself is made up of rotating strings, grapheme displacement must respond to all deviations from uniformity in space and time. Stated in geometrical terms, intrinsic properties are assembled rhythmically and in a clocking mode. String movement must be connected to a stepwise cyclic (κ_i) production of compounds, which leads to composites for which the range of a work-cycle determines cyclic returns. With flow fields as intermediary links, this measure generates the ground for the processing of phase-dependencies. Produced by the [AaO] formalism, individual string movements on the micro-level allow their coupling with trends in the global text dynamics. Applied to the epilogue, it is made evident that the final state attraction of Intention has resulted in *Roman subjugation* while the final state of Orientation has established *Case management*. Both states are the result of deeply ingrained structural commonalty.

Common law means the evolution of British legal order out of Roman law. Ruling, based on precedent, means that courts of the same and lower rank are bound by the rule of principle that underlies the ruling in the judgment. Under Roman rule, apart from the peasantry, every legal resident flourished in Britain. Roman law is still known by every English lawyer as a legal system that has existed over many centuries on the Isle. In particular, it is the solid and unique achievement of the Romans, which were adopted by many people, much like deities, prose, tales or table manners.

As early “businessmen”, British people had the luxury to live under Roman law in a peaceful country, which was guarded by a few Roman legions, sufficient to ensure external security and internal peace. Due to the protection by Roman forces, folks in Britannia prospered and grew well. Moreover, British weavers had early and far-reaching contacts with China, which allowed them to produce coloured woollen of excellent fabrics. Thereby, they accumulated riches, which gave many inhabitants the opportunity to acquire large estates and to increase their domains at the expense of the inferior farmhouses. At the cost of the small farmers, the larger estates increased in prosperity and were able to equip their houses with Roman-inspired luxury such as central heating and window fitted out with cut glass. At the disbursement of many agrarians, ownership as free farmers was sold. In consequence, the farmers were turned into tenants or city proletarians. Still, in their defence, many farmers did support raiding Anglo-Saxons, who came to their protection and attacked their foes, which were the land-living nobility.

In the historical description to be found in Gilda’s Chronicle, the appearance of a large-scale Pict and Scot invasion did alarm the British leader Vortigern, the king of the Britons, who called on some northern Germanic tribes to come to his aid. Saxons came from

the Elbe; Angles came from Schleswig und Jutes came from Jutland. Gildas (Breton: Gweltaz, about 500-700), also known as Gildas the Wise or Gildas Sapiens, was a sixth century British monk best known for his scathing religious polemic “*De Excidio et Conquestu Britanniae*”, which recounts the history of the Britons before and during the coming of the Saxons. He is one of the best-documented figures of the Christian church in the British Isles during the sub-Roman period, and was renowned for his Biblical knowledge and literary style. In his later life, he immigrated to Brittany where he founded a monastery known as St. Gildas de Rhuys (Gildas, *Wikipedia*, 2019, May 20).

Germanic tribes, which were arriving in Britannia, did drive the Picts back. As a suitable reward, they were given a piece of land. In connection with the fights, the stronger and more powerful Germanic warriors noticed the military weakness of the Brits and despite their bravery; they were seen to lack proper fighting skills. In the view of the Germanic leaders, this circumstance was happy news to be sent to their companions at home. Beda, who was an English Benedictine monk at the monastery of St. Peter and its companion monastery St. Paul in the Kingdom of Northumbria of the Angles, was known as an author, teacher and scholar. His most famous work was “*Ecclesiastical History of the English People*” (Bede, *Wikipedia*, 2019, May 16).

Britain’s weakness and insufficient fighting skills were contained in the message from the Warlord Vortigern, which initiated the discharge of additional Germanic bands that landed on the shores of Britannia. They had an easy task in overrunning the Celtic troops, gathered and supplemented with Celts from the Britannic region of the Frankish mainland with the purpose to defend the kingdom. Experienced resistance was weak and a century of insurgent fights implied surrender to the Germanic forces, which finalized in the battle at Dyrham in 577 AD (Dyrham, *Wikipedia*, 2019, May 09). The combat was a decisive military encounter between the West Saxons and the Britons of the West Country. In the disgraceful defeat, most Britons accepted the new superiority and arranged themselves with the new Lordship. Those, who refused the new order withdrew into the mountains of Wales or disappeared over the Channel with the effect that the peninsula became known by their name as Britany.

The disaster, which originated in the defeat by the Anglo-Saxons, left the Isle with a disruption of the beginning Christianization, and the disappearance of the Roman civilization. However, a Celtic element remained in the appearance of literature and art, meanwhile Germanic language and culture had great influence as well as the set-up of village communities, which were administered according to Anglo-Saxon law (Durant, 1967, Vol. X, Chap. 4, pp.158-159).

After the Romans had left the Isle, the situation had changed in Britannia. Native inhabitants remained relatively free of foreign powers. However, in 597 AD, strong Roman influence reached again a level that had an impact, but now in the hands of missionary practitioners, like Beda, who lived between the March of 672, and the May of 735, which brought with them the art of letters, writing and literacy. Since the time of Beda, Anglo-Saxon law has become known as a body of written rules and customs that were the second in medieval Western Europe after those of the Irish to be expressed in a language other than Latin. The laws of the Irish isle were written in the Old Irish period (about 600–900 AD) and probably reflect the traditional laws of pre-Christian Ireland (B. Bierschenk, 2020).

The morphogenesis of intention and the structural stability of the significant motifs of the appearance of the first Anglo-Saxon law code will now be investigated based on the Agent-action-Objective [AaO] paradigm (B. Bierschenk, 1984). However, the requirement for this analysis can be satisfied only under the condition that the import of the quotation becomes approachable. According to E. D. Re (1961) epilogue, the strategy to be presented in the following concerns the possible Roman contribution to the common law of England:

It is hoped that enough has been said to show that the roots of the common law of England are not exclusively Anglo-Saxon. Since there is neither virtue nor greatness in autonomy, and since such a conclusion would do violence to the rules of probability in civilization, the more objective evaluation would acknowledge a Roman influence. Even assuming that the soil was not prepared during the Roman occupation, it is impossible to discount the role of St. Augustine and the Missionaries who followed him.²² And all of this before the Norman invasion with its influx of a host of Roman law scholars commencing with Lanfranc. The story thereafter shows more clearly, how the common law was nurtured in an atmosphere of Roman intellectuality - ethical, philosophical and judicial. (p. 493)

Most important for the processing of this quotation from the epilogue is that (1) one must be able to make the text producer known through text production, and (2) recover the underlying dynamics through attitudinal changes step-wise and, according to Baeyer (1999), without intervening dissociations and in perfect order. Getting the impact of the quotation under experimental control presupposes that the (A) component of the [AaO] model can be discussed with a focus on string rotation and the establishment of lawful relations that include the component of “Intention” in the laws that are governing the patterning of strings of graphemes. Therefore, it will be demonstrated that the introduction of an angular articulation resolves the characterization of dynamical string movements.

However, independent of their textually embedded magnitudes, dynamical string movements cannot survive. Thus, spaces will become realised, which will restrict string rotations. Over the specified textual environment of the given epilogue, it will be demonstrated that uniqueness is achievable in its comprehension. Further, in the formation of motifs, the morphogenesis of intention and its structural stability will be provided based on a 3D control, meanwhile the growth curves of the underlying motifs and the structure of the corresponding objectives will be shown to evolve in the separated landscapes of intention and orientation.

The language of the epilogue to the Roman contribution to the Common law, conceived of as a bio-kinematical system, is assumed to exhibit clock-like rhythmic behaviour. The clocking disposition of the text constitutes the basis for studying strings, bound to the (A) component and strings, bound to the corresponding (O) component as well as their periodicity. Since text develops evolutionary, it is possible to show that the discovered [AaO] mechanism operates in accordance with a pendulum. Even more important is the fact that the pendulum obeys two laws:

- (1) The first requires the mechanism to keep and conserve the strict dependency, which must hold within A-O pairs.
- (2) The second demands that the pendulum is always establishing superstring symmetries.

Together, the two laws have the capacity to lead to an invariant coordination of the text producer's intention and orientation. Here, the term “invariant” refers to the establishment of a “coordinate-free” kinematics (Hestenes, 1986/1993; 1994 a, b). This measure will make it possible to control the interplay between the function of intention (int) and the function of orientation (ort) in the formula $\{[int(A)] \text{ a } [ort(O)]\}$. The formula constitutes the foundation of systems of language-specific coordinates (B. Bierschenk, 1984, p. 11). Since the

coordinates are intrinsic, they constitute the self-evident basis for the establishment of invariants.

In the open spheres of a language space, the supplementation (S) function must always control the direction of “growing string-vectors”, which means that the S-function is working in a non-commutative context. However, with respect to the viscous-elastic properties that is determining the magnitude of intention and orientation, the effects of deformation become manifest through multi-layered entanglements, which are refracted through imperfect [AaO] units. For that reason, growing must be equated with rotational differences, which are the result of differences in the energy, originally invested into perfect [AaO] units and the energy, fused into imperfect units. Even more important is that this kind of differences appears at the thermodynamic level as “waves”, which relate to various forms of rotational speed and acceleration. The numerical calculations are given in the Appendix, Table A1. Due to the calculations, it has simultaneously become obvious that string movements are influencing the differences evolving in the development of the shapes of the unfolding textual flows. As demonstrated with Figure 1, accessing the flows and their scope by means of the response surfaces as well as their import is approachable only through observations on intervals and the study of intermittent phase transitions.

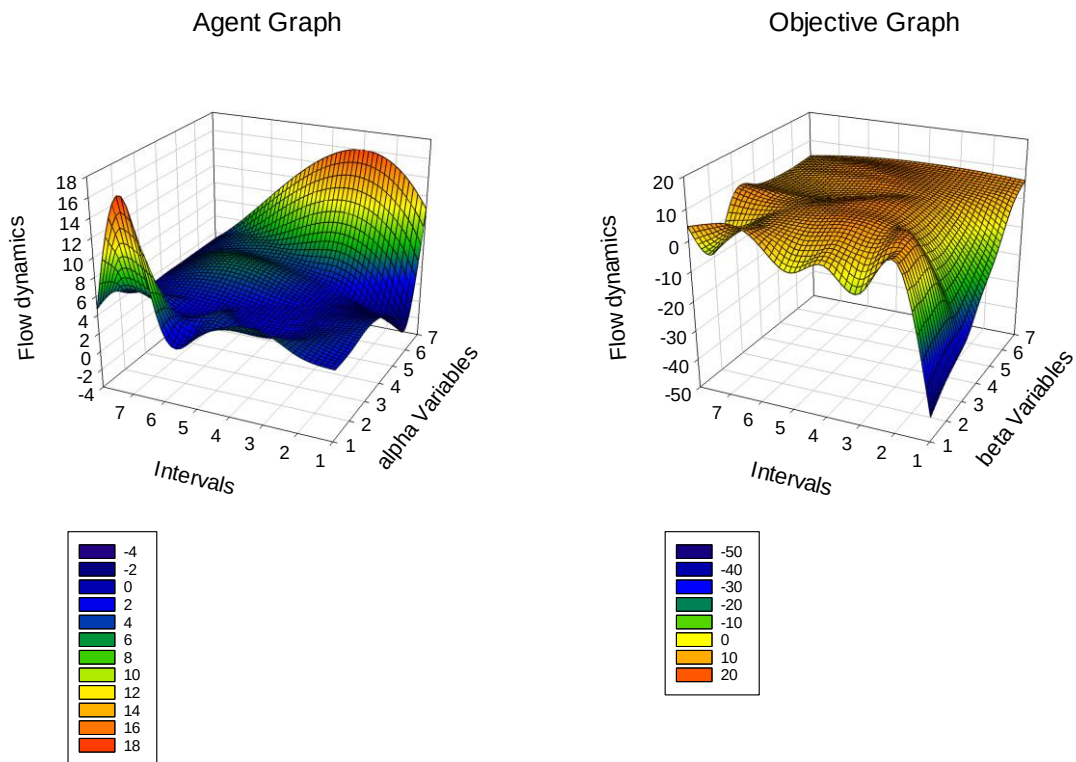


Figure 1 *Unfolded response surfaces of the epilogue of E. D. Re (1961)*

Like flows of a river, textual flows are characterised by eddies, vortices and cascades. Thus, what kind of morphology is developing during transformation is dependent on the constraining effects of the states of the system and how these states are governing the conductive capacity of channelling operations, which for the Objective, i.e., the (O) graph are marked with the dummy $[\emptyset_O]$. As a rule, the special character of the operations will generate complementarity. A higher degree of rotational speed is responsible for a higher degree of

bubbling crystallisations, which are unfolding at the top of the shape of the (O) graph. On the other hand, the dummy $[\emptyset_A]$ of the Agent (A) graph illustrates the fading of the “textual agents” and hence, accounts for some differences in rotational speed and contrasting accelerations.

Since higher speed is responsible for higher degrees of crystallisation, the special character of the channelling processes allows for the manifestation of channelling operations of lesser complexity. For example, the path in the (A) graph illustrates a slight fading and hence faint differences compared to the contrasting speed and acceleration in the (O) graph. In contrast to the (A) graph, enlargement in the sinking of the “textual objectives” is another way of fading. Hence, the dummy $[\emptyset_O]$, underlying the (O) graph, signals are increasing implicitness. Nevertheless, progress in understanding the biological nature and evolution of the trajectories of the response surfaces has been shown to depend mainly on the functions performed by the evolving channels.

On the kinetic level of text production, it means for the (O) graph increasing depth. A steep in the corresponding graph below zero corresponds operationally with lower rotational speed, compared to non-negative expressions. For example, when a large increase in critical acceleration can be observed, as in the forefront of the first interval, it points primarily to a marked integration depth. This means that the corresponding steep is extending over five variables, which corresponds operationally with a high degree of rotational acceleration. When compared to the (A) graph, it can be concluded that the special character of the operations in the (O) graph has generated an impressive complementarity.

What kind of morphology is developing during transformation is dependent on the constraining effects of the states of the system and how these states are governing the conductive capacity of the textual operations underlying the (A) graph. A high degree of rotational speed is responsible for the crystallisation at the far left of the (A) graph. Responsible for this outcome is the first variable, which has the following composition: [And all of this before the Norman invasion with its influx of a host of Roman law scholars]. This outcome appears in the seventh interval and illustrates the emerging change in complexity, which is the result of an extended series of strings of graphemes.

The complexity in the depicted (A) variable shows how string movements are influencing the differences in the development of the shape of the unfolding textual flows. Since the measured speed in (A) is related to the transition through flow fields, variable seven is based on the following string of graphemes: [that the roots of the common law of England]. The depicted string has appeared in the first interval. The string marks another kind of crystallization. Between these markers are a given number of flow fields observable that have been identified with the expression of a “basin” (Wales, 2003), i.e., a depth relation. When its deepness is summarised, distance can be identified with variations in morphological specification.

Another peculiarity to be observed on the unfolded response surfaces is the difference in the reflected overall relations, which are carrying information concerning the depth in a particular textual flow. Consequently, in the context of the text materials of the epilogue they have to be conceived of as super-fluids, which are strings of a “virtual” kind and which are responding in an elastic way to the dynamics of evolving textual flow patterns. It is therefore not a coincidence to suggest that the text materials must be characterised by flow properties and that these are decisive for the rotational dynamics and accordingly for the realisation of the kinetics of a language space. The phase transition of a string from its material to its immaterial state must result in a superfluid solid, which means that flows of kinetic energy are expected to decrease the symmetry of a string. At a distance from these states, phase

transitions seem to be dependent on “superfluids and flows without dissipation” (Hurtley & Szuromi, 2004).

Evolutionary Search for Novelty in Energy Landscapes

If it shall be possible to orient oneself within an “energy landscape” (Wales, 2003), it must be possible to transit its terminal states and to manifest the result in the form of a transformation path. It follows that this operation must become recognisable in the form of termini. Since a terminus is the result of a transformation process, it incorporates both the “state” as well as its “dependency relation”. When the response surfaces of the sequencing spaces of Figure 1 are analysed further, the results of the analysis may be presented in the form of resulting concentration spaces and with a focus on their folded complexities. In other words, it will be summarised the way in which the information can be determined conceptually.

The *landscape* concept implies that a new kind of “conservation” principle can be approached experimentally. Its common causal determination may be understood as the functional definition of *fitness*. To catch its fundamental implications for approaching a language space requires that strings of graphemes can produce valid textual resonance properties. In order to reveal the way in which resonance properties cause singularities to emerge, the space hypothesis will be used in the study of singularities. Their theoretical significance relates to the core configuration of a space that is assumed structurally invariant over various mesh systems. Further, it will become evident that contextual differences may produce differences in the emerging singularities.

To the degree, that a transformation has the capacity to bring about a certain information pattern, space and time may be regarded to have produced deeply ingrained structural commonalities. The way in which particular (A) and (O) operations are influencing the determination of singularities will be illustrated with the establishment of the folding processes for the “Intention” dimension of the (A) component and the “Orientation” dimension of the (O) component. However, to handle the subtle distinctions of this process implies that their discovery provides an unbiased foundation for the evolution of various types of superstrings and singularities of different complexity.

Superstrings are observable only with respect to conservative self-organising processes, which appear in the neighbourhood of their thermodynamic equilibrium states. Through individual variations, it is possible to demonstrate the formation of unique point attractors and the manifestation of structural stability in the morphogenesis of state attractors. These are in a non-linear way dependent on *shear* and *strain*, which are the order parameters that control the states of the system and their changes over time (B. Bierschenk, 2001, 1993/2013). In general, superfluid systems are those, which are open to the channelling of information, which means that a change in the dynamics of superstrings can be described with reference to the identity relations that are set-up as basis for the channelling of information flows (B. Bierschenk, 2005; Bierschenk, B., & I. Bierschenk, 2005).

Since all textual systems are building up their own unique development, their behavioural expression will be shown to reappear structurally in the produced folding. In addition, the emerging attractors will be used with the purpose to make evident that structure requires the concepts of wholeness and evolution. Besides the capacity to work towards the unification of states, the established singularities are converging on the global or final state attractions. In searching for a novel state attractor by means of a naming path, its corresponding description means that the path may be conceived of as “evolutionary search tool” (Ebeling, Scharnhorst, Montaña, & Karmeshu, 1999, p. 449). It is expected that a responsive remoulding will allow the resulting state attractors to incorporate both intention

and orientation. In moulding self-sensitivity, a high degree of softness may become observable and appear as interplay between increasing and decreasing shades in meaning. This analysis is presented through Graph (2), Graph (3), and with the concentration depicted in landscapes with high and low mountain formations and valleys.

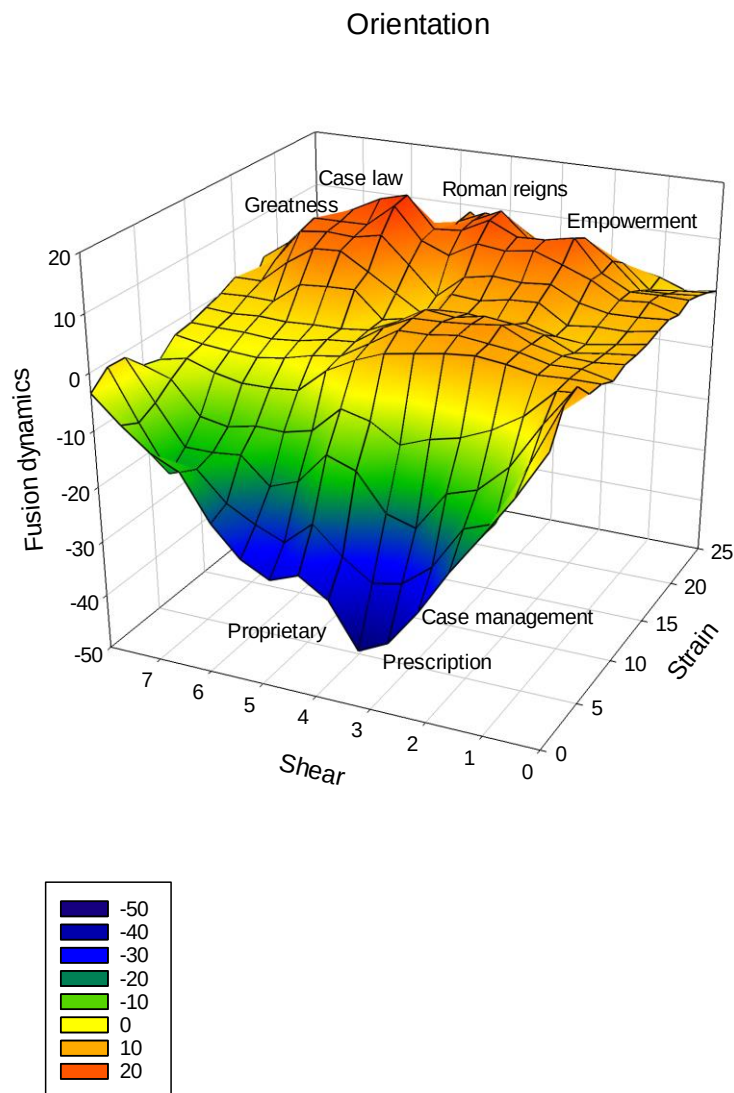


Figure 2 *Folded objective surfaces of the epilogue of E. D. Re (1961)*

Since neither intention nor orientation is fitted into one or the other empirical context, any transformation must attune itself to the predetermined (internal) order of the epilogue. This implies the assumption that the application of Greene's space-tearing hypothesis (Greene, 1999, p. 278) would reveal the validity of the idea behind the epilogue. Moreover, by adapting Greene's mirror-strategy, it becomes possible to carry out a rigorous validity examination. Thus, the strength of the approach must emerge through the processing itself! The underlying assumption is that the sensitivity in the pick-up of the information quality is a fitness function, which constrains mental resemblances. Since meaning is contextually specific, it is important to relate a text to its particular context.

© 2021 by Bernhard Bierschenk

All rights reserved.

A detailed description of the transformation steps involved in the production of a sequence of attractors is given in Table A2 of the Appendix, which allows for the examination of the thoroughly controlled naming process. Further, the terminologically controlled state-changes are expected to lead to the correct communication of the contextually significant information invariants. Thus, transiting through the energy landscape of Orientation component is strictly controlled by the underlying attractor relations. The generated termini are precise, since they are correcting themselves. Repeated transformations and crossing of one path with another allows for the integration of the consequences of having found the proper transformation path in the form of structurally defined dependency relations. Thus, shifting experiences are provided during the naming, which is expected to lead to an understanding of the meaning of the performed transformations.

For this process to be comprehensible, it is worthwhile to follow up the procedure of generating termini by going back to the text surface, because that is the place where the structure of the text is anchored. In order to get some feeling for the way in which the recommended procedure works, the outcome of the final step in the transformation process will be taken for the beginning and has been depicted in Table 1.

Table 1

Transformation of T_{25} through T_{44} to T_{45}

<i>X</i>	<i>Y</i>	<i>Node</i>	<i>Value (g)</i>	<i>Description</i>
15	6	T_{25}	96.9408	Case law
2	2	T_{44}	-156.4638	Prescription
2	3	T_{45}	-59.5230	Case management

The best approximation appears to be given in (T_{45}) in order to catch the resulting strength in this transformation step. The procedure begins with the mandatory operation of the state attractor (T_{44}) which is changing the path into its final state. Hence, to have any influence, it must transform (T_{25}) into something new!

Prescription Deeply ingrained in the argumentation, is the significance of the fact that the UK became a signatory to the “European Convention on Human Right” (ECHR) in 1950. This means that the UK is bound by the Convention and its obligations. Since 1959, the UK has guaranteed to bring judgements made against it into domestic law through legislation. The Court in the UK was obligated to take account of decisions of the ECtHR when applying Convention rights. Furthermore, the negative and positive obligations under the right to life have to be evaluated (*Law Teacher*, 2019).

Case law The most important sources to the English case law are provided by the Roman law (Law in Ancient Rome; Düll, 1953) and in the Yearbooks of the “Boston University School of Law”, which are the precursors of modern law reports. Many have been printed but the principal developments of the legal doctrines in the English courts are from the late thirteenth century to 1535 (Seipp, 2019). In common law countries, the term “case law” is a near-exact synonym for common law. It is used for judicial decisions of selected appellate courts, courts of the first instance, agency tribunals, and other bodies discharging adjudicatory functions (*Wikipedia*, 2019, July 27).

Case management increasingly, judicial case management requires an offer of judicial courses at Universities, which involves judges and other administrative personal with the purpose to grab complex issues and to teach how to manage cases. In response to a need for a more effective management, courts have become responsible for handling many new agencies and the development of fair and transparent systems for the administration of justice.

Recognizing the key ingredients of a modern and successful case management strategy is at the centre of the final state attraction. It may be an open question to what degree the terminus refers to the process of smart and artful planning and carrying out a plan for forming the behaviour of an individual or to the limits of growth, which would be pulling back judicial behaviour into its normal range of functioning. However, demonstrating one's independence and integrity through effective case handling is the priority goal, which should be effective in influencing others through an appropriate use of case management directives (*Crown Agents*, 2019).

Proprietary The concept is addressing sensitive information that is owned by a party in a judicial case. This kind of information may give a defending individual or firm a certain competitive advantage in a court case. It is most critical when assets are the intellectual advantages on a highly competitive global scene. Table 2 shows the dependency relation that has produced the special relation between “Expectation” and “Foresight” concerning knowledge and skills that an individual may have learned which includes secret formulas, processes and methods that can be transferred to outsiders.

Table 2

Transformation of T_{40} through T_{41} to T_{42}

<i>X</i>	<i>Y</i>	<i>Node</i>	<i>Value (g)</i>	<i>Description</i>
2	6	T_{40}	-80.0276	Foresight
1	4	T_{41}	-34.7596	Expectation
2	4	T_{42}	-114.7872	Proprietary

The operating attractor (T_{41}) implies that information to be considered “Proprietary” (T_{42}) must be treated confidentially by the court. In particular, courts will treat information not readily available to the public with a certain degree of “Foresight” (T_{40}) since competitive advantages should be unknown to individuals outside the appropriate circle. Any individual as secret holder, who has taken steps in the hope to obtain court assistance, must be able to demonstrate a reasonable measure of protection. However, the expected measures must be sensible with respect to confidentiality. Table 3 may be helpful by explaining the context of the attractor.

Table 3

Transformation of T_{23} through T_{24} to T_{25}

<i>X</i>	<i>Y</i>	<i>Node</i>	<i>Value (g)</i>	<i>Description</i>
17	6	T_{23}	88.6512	Greatness
15	7	T_{24}	8.2896	Stare decisis
15	6	T_{25}	96.9408	Case law

The key operator in Table 3 is “Stare decisis” (T_{24}) which, according to the free *Wikipedia* dictionary, has a Latin root, meaning ‘Let the decision stand’. The implication of this phrase is captured in the policy of courts to abide by or adhere to principles established by decisions in earlier cases. Understanding the application of the principle requires that a question be answered unaltered by same or lower courts in the corresponding jurisdiction. “Greatness” (T_{23}), influenced by the operator (T_{24}) may be attributed to the natural ability of a judge to be better than all others may. The concept carries the implication that a particular judge, when

compared to others of a similar kind, has clear advantages over comparable types. Related to the operator value (T_{24}), assessing the quality of a judge is dependent on the perspective and subjective judgement of those who attribute the perceived “Greatness” (T_{23}) which may be both fiercely contested and highly individual (admirable).

The transformation outcome of Table 3 is “Case law” (T_{25}). In particular, the UK is a common law country, i.e., a Case law country. The consequence of this circumstance is that case law and judgements are of particular importance, as the doctrine of precedent applies to the work of the courts. Because of the UK convention, the judgement of each case can bind all subsequent cases, however, depending on the seniority of the court. It is worthwhile to notice that the court system is hierarchically organized, which means that case law becomes part of the law by either setting legal precedents where there is no legislation or by interpreting legislation.

This state attractor implies case law as a set of past rulings by tribunals that are cited as precedent. Its meaning is applied to any set of previously performed rulings. Normally, the burden rests with the litigants (‘accusers’) to appeal rulings, including those in clear violation of established case law, to the higher courts. If a judge acts against precedent and the case is not appealed, the decision will stand (Case law, *Wikipedia*, 2019, July 27).

The legacy of the Romans can be discovered in Britain by the remains of their ancient forts, roads and walls. To Britain the conquering by Romans had also a lasting effect on legacy and contributed to the construction of villas, palaces and spas, discovered for example in Bath. As marked by the operator (T_{20}), “Roman legacy” is the result of a one-variable point attractor as shown in Table 4.

Table 4

Transformation of a string of graphemes into a point attractor

X	Y	Node	Value (g)	Description
22	4	D	0	
22	5	T_{19}	6.9120	Prepared during the Roman occupation
21	5	T_{20}	6.9120	Roman legacy

The depth of the Roman influence on the British citizens was such that it can be noticed even today not least in a sense of national proud, attributable to Roman technological remains, architecture, impact on language and effects on government. In particular, the military legacy is the most apparent. Besides introducing new weapons, armour and tactics, the Romans build the “Hadrian Wall”, beginning in 122 AD. Moreover, they tried to construct another border wall, called the “Antonius Wall”, meanwhile the Hadrian wall has remained the most effective border of the Empire and the greatest piece of Roman military architecture. The impact of the military garrisons was obvious as a training ground for the “Empowerment” (T_{19}) of the leading men of the Roman Empire. This relation is pictured in Table 5.

Table 5

Transformation of T_{19} through T_{20} to T_{21}

X	Y	Node	Value (g)	Description
19	3	T_{19}	72.5576	Empowerment
21	5	T_{20}	6.9120	Roman legacy
20	5	T_{21}	78.7496	Roman reigns

The governors of the Roman legions in Britain were able to build up their own bases of power by which they could become the instrumentalists for rebellion might. As invaders, the Romans marched through the kingdoms of the Celts.

The early Roman governors were idle in their endeavour to impose religious beliefs on the native pagans. This situation changed in a second wave of Roman invasion and religion did become an important part of “Roman legacy” (T_{20}). Pantheistic in structure the Roman belief system merely absorbed the local deities. Constantine the Great (Latin: Flavius Valerius Aurelius Constantinus Augustus) declared in 305 AD Christianity the central religion of the Roman Empire, which transformed Britain at the battle of Milvian Bridge in 312 AD into the birthplace of Roman Catholicism. This event happened in Britain when Constantine the Great was acclaimed emperor by the army at Eboracum (modern-day York). He emerged victorious in a series of civil wars against Emperors Maxentius and Licinius to become the sole ruler of both west and east by 324 AD. For 400 years, Britain played an important role in the “Roman reigns” (T_{21}).

The Morphogenesis of Intention and Structural Stability of Motifs

The extraction of the descriptors for the invariants of the dimension of “Intention” will begin by making an important demarcation: To restate the condition for the naming of the trajectories in the landscape, shown below in Figure 3, the distinction is made between a point of observation and the corresponding points of view.

Through the expression of a particular idea, in the concentration space, the dependency between both viewpoints and motifs makes full use of the textual articulation, which is reflected in Table A3 of the Appendix. Through the coupling of the pathways of both the “Agent” net and the “Objective” net, Table 6 gives an extraction example of the computational output.

Table 6

Extraction of the Roman subjugation

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
X	Y	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
2	4	$T_{37}; T_{A36} \rightarrow T_{A35}$	T_{O35}	Roman subjugation	131.377497

A structural expression of a viewpoint is representing a specific orientation, while a point of observation is representing a certain motif. A point of observation is effectively contributing to a refinement of the characteristic quality of the configuration of the Intention space. Table 6 shows the extraction process that is associated with the establishment of the attraction of the final or global state.

The cyclic extraction of the names of the information invariants of the (O) net starts with the process of extraction. Thereafter is the process advancing through the states of attraction. Through a cyclic extraction of the names of the information invariants of the configuration in the (O) net, it is demonstrated to what extent the oscillations in the (A) net have caused a significant redistribution of the articulation potential contained in the epilogue. Based on the state attraction of the Intention space, the cycles of attraction are mirrored in the Orientation space. The resulting swing is terminating the pendulum at the destination (T_{O35}). By cycling through the (O) net, “Roman subjugation” is extracted as the proper name of the invariant of the final attraction state, which is specifying the meaning of the resulting configuration in its entirety. Since the identified name is determining the proper equilibrium

of the final cycle, the name is uniquely characterised with respect to the involved intention. As with most ancient civilizations, the military of Rome served the triple purpose of (1) securing its borders, (2) exploiting peripheral areas through measures such as tribute on conquered peoples and (3) maintaining internal order.

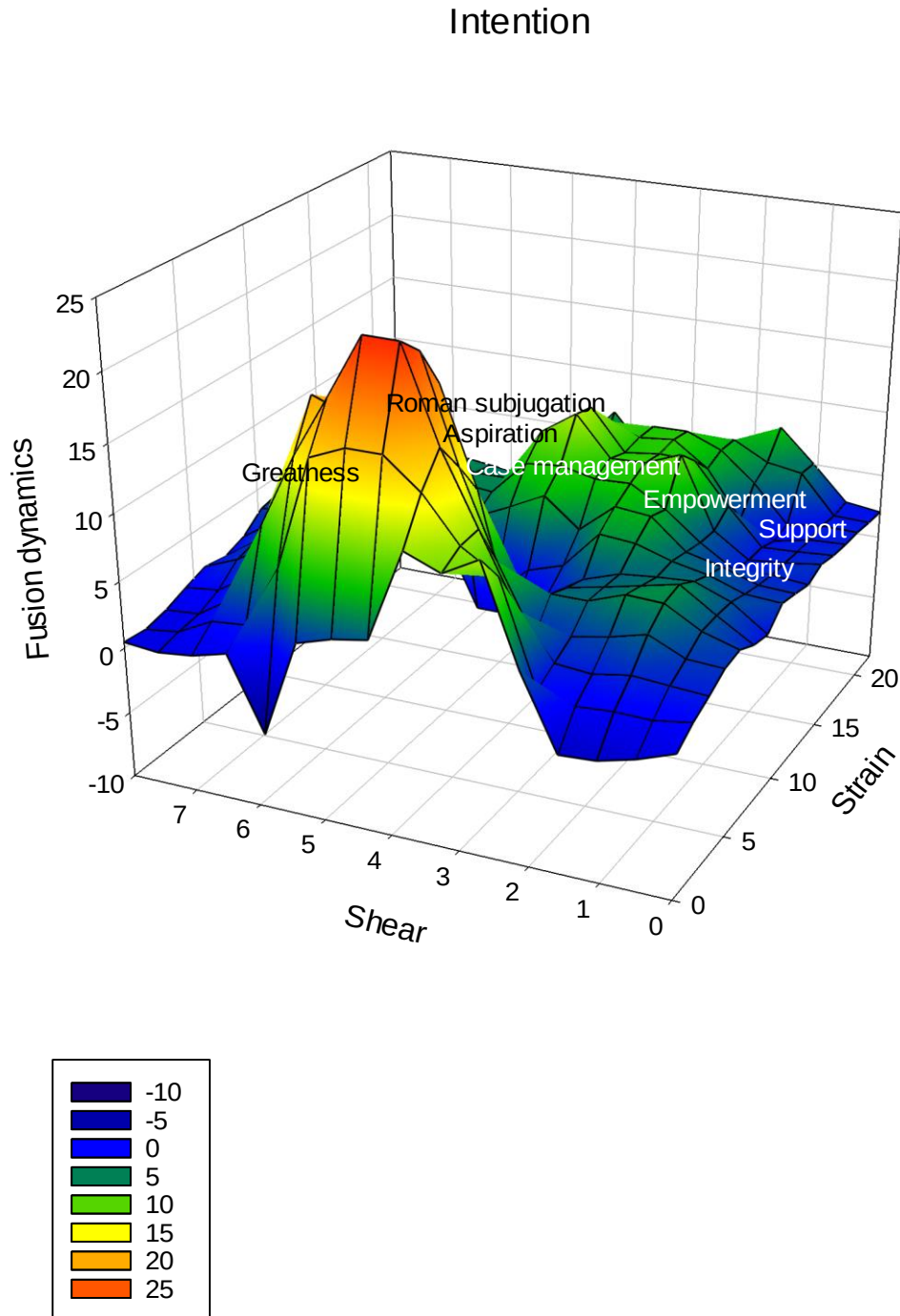


Figure 3 *Folded Intention space of the epilogue of E. D. Re*

The Roman army battled at its height the province of Britannia. After Caesar's low-scale invasion of Britannia the Romans invaded in force in 43 AD. Tribes in modern-day Scotland and Northern England rebelled against Roman rules and probably two military bases were established in Britannia to protect against rebellion and incursions from the north.

Although the crisis of the third century AD was not the absolute beginning of Rome's decline, it nevertheless did impose a severe strain on the Empire as Romans waged war on one another. Many theories have been advanced with the purpose to explain the decline of the Roman Empire. Militarily, the Empire was overrun by various non-Roman peoples and then having its heart in Italy seized by Germanic troops in a revolt.

A new point of departure is given in the point attractor (T_{A34}) which is carrying the string of graphemes: [that the roots of the common law of England]. The stability of the state attractor is determined by variable (7) in interval (2) of the Agent space. The initiating swing aims at the endpoint, determined by variable (26) in interval (8) of the Objective space which is carrying the substituted strings of graphemes according to the following series: [was (how the common law +nurtured +in an atmosphere +of Roman intellectuality +ethical +philosophical and judicial.)] The redistributed potential is attributable to the dependency between the net of the Agent and that of the Objective and a process that is producing the redundancies, marked with the brackets []. Thus far, point singularities appear to be the distinctive outcome of the fusion. With changing appearance in the one-variable manner, it can be concluded that cooperative interaction appears between single variable groups (Connes, 1994). Each vertex possesses an equal and positive charge, while each edge is associated with a negative charge.

In balancing out the edge by charging the negative (-) in the (O) net, the process of equilibration is resulting in the composition of a trivial centre (Changeux & Connes, 1995, p. 136). In this sense, triviality can be equated with redundancy. In its entirety, the (A) net configuration exhibits relatively little expended elasticity. On the other hand, the link implies that a rotational transformation is underlying the composition of the state attractor (T_{A35}) in Table 7.

Table 7
Extraction of Aspiration

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
4	5	$T_{35}:T_{A34} \rightarrow T_{A33}$	T_{O33}	Aspiration	114.751197

The continuously bending curve, which is characterising the evolving path of the intention dynamics, gives expression to an ordered sequence of positions that differs to a certain extent from the specification order of the (O) net configuration. In as much as a configuration is conceived of as autonomous in its oscillations, it has been possible to determine the evolving "Aspiration" motif in relation to the evolving constellation.

In what way the swing in Table 8 is influencing the intentional behaviour of the variables in the (A) net is determined at the highest point of the resulting curve and immediately before the swing ends. The location that points to the proper name, which is "Greatness" (T_{O23}), becomes at that moment the final point of the destination. Judicial greatness is not easily identified and even less measured by objective criteria. The relationship in Table 8 requires an inductive and intentional approach, which is focussing on courage, integrity and indisputable accomplishment.

Table 8*Extraction of Greatness*

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
14	5	$T_{25}:T_{A24} \rightarrow T_{A21}$	T_{O23}	Greatness	88.6512

The excellence of a good judge may be compared to the attributes, defining a great judge, who will have a broader impact on the direction of law. The achievement of judicial greatness will require bold self-confidence. From the intention point of view, the aspiration to greatness may be conceived of as an ambivalent and individual quality, which is reaching over and above goodness (Fallon, 2015).

Case management conceived intentionally, applies to procedures at a court. The attractor refers to the scheduling of proceedings and motions that relate to events, which may occur before a trial is held, or a decision is rendered in litigation. Each stages in the “Case management” (T_{A33}) the process is, according to the concept of Table 9, framed by a schedule that must hold with reference to the schema of the court. Alternatively, the Case in question must have been completed.

Table 9*Extraction of Case management*

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
5	5	$T_{33}:T_{A32} \rightarrow T_{A25}$	T_{O45}	Case management	104.153647

Case management means an identification of essential issues in the litigation to avoid unnecessary and burdensome work in preparing for a trial. Otherwise, the complaint to be handled must be assigned to a judge. Depending on the jurisdiction, Case management procedures may be applied with the purpose to formalize the meeting between judge and the plaintiff. This kind of meetings appears outside the law frame, which means that a defendant or witness is not expected to be present. The resolution that may be achieved is to get a settling or get the issue in the dispute to dissolve intentionally.

The relationship of the information invariants at the right-hand side of the Intention landscape in Figure 3 has been determined as “Empowerment” (T_{A21}). This is an inductive expression of one’s quality control. Besides a simpler formation of mountains and valleys, the evolving path has produced a few named peaks of which the first appears in Table 10.

Table 10*Extraction of Empowerment*

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
21	3	$T_{21}:T_{A20} \rightarrow T_{A17}$	T_{O19}	Empowerment	62.183034

Intentionally, “Empowerment” is anticipating that a special amount of energy is produced at court hearings with a positive intention. Furthermore, Empowerment is a process that invites the judges at a court to assess the possibility for an individual to get a fair trial. The absence of a single legal system means that the English law is empowered by common law tradition.

The implication of this circumstance is resulting in a law system that is made of judges. This particular system has been developed continuously over centuries through the decisions by judges in the cases brought before them. Therefore, English judges have an important role in developing case law and stating the meaning of ‘Acts of Parliament’. Since the judges are independent of the government and the people appearing before them, they are allowed to make impartial decisions.

The intention to create legal relations or in other words the intention to be legally bound is a doctrine used especially in English ‘contract law’. Table 11 picks up the “Support” (T_{A17}) of an agreement that is legally enforceable only if the parties are deemed to have intended it to be a binding contract.

Table 11
Extraction of Support

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
17	3	$T_{17}:T_{A16} \rightarrow T_{A15}$	T_{O17}	Support	50.780174

The doctrine supports common law jurisdictions and stipulates whether a court should presume that parties to an agreement wish to be enforceable at law. It may be expected that the underlying solidity and strength reflect the proper manifestation of the complementary dimension of Intention. The shape of the resulting surface of Figure 3 is crucial for a consideration of the theoretical value of the developed intention.

When people show symptoms of incapacity and even aversion when it comes to personal development, the blame may be thrown on society and its representatives. However, in times of depression, when society has to restrict its “Support” to the citizens, internal ability of an individual will be given greater significance as basis of explanation. Thus, the issue of nature and/or nurture (Ridley, 2003) has significance for development and is as appropriate today as it was hundred and fifty years ago (Porter, 2004).

The key to Ronald Dworkin’s constructive interpretation of legal practice in England is the conception of law as integrity. “Integrity” (T_{A15}), of Table 12 is based on a vision for judges. This vision requires that the judges have developed a conception of justice and fairness. The judges should be able to identify legal rights and duties.

Table 12
Extraction of Integrity

		<i>A-net</i>	<i>O-net</i>	<i>Concept</i>	<i>Fusion</i>
<i>X</i>	<i>Y</i>	<i>Swing</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (g)</i>
15	2	$T_{15}:T_{A14} \rightarrow T_{A13}$	T_{O13}	Integrity	47.469873

English Case law integrity assumes that it is structured on coherent principles. Judges must enforce them so that all fresh cases are treated equally. The extracted concept directs judges to decide cases by using the same methodology from which “Integrity” was derived as both a legislative and an adjudicative principle.

“Integrity” as proposal must satisfy two dimensions. (1) It necessitates consistence with the data identified as constitutive for the practical case and (2) it must justify the belief of the judge in the righteousness of his legal interpretation. Dworkin argues that ‘Law as Integrity’ is a coherent whole, which requires that a judge has to go through the law in its

entirety in order to consider the rectitude of his interpretation. Law considered as “Integrity” holds that a judge would have to fit and justify what has been decided in previous cases.

Epilogue

To decide on the fate of Britannia and its people is a difficult task, since the case rests largely on linguistic evidence. The term used to describe any member of the Germanic peoples was Anglo-Saxon. They inhabited and ruled Britannia after the Romans had left and before the Normans had arrived. By transforming themselves from barbarian invaders into Christian missionaries, they shaped a religious evolution that lasted about six hundred years, from 410 to 1066, and during this time, the political landscape of the Isle underwent many changes. The body of legal principles, as reported by “The Editors of *Encyclopaedia Britannica*”, are in conjunction with Scandinavian law, called ‘*leges barbarorum*’. The system was composed on the fundamental opposition between ‘folkright’ and ‘privilege’. Folkright is an aggregate of rules, whether formulated or not, that can be appealed to as an expression of consciousness.

Before the Norman invasion, an individual action was not an exertion of his own will but an act of his kinship group. In connection with the exchange of “property”, witnesses were required, not to validate the exchange but to protect against later claims on the property. Furthermore, the preservation of peace was an important feature of Anglo-Saxon law and the task of the ruler within a specific region.

The system underlying the laws was already very old when it was brought from the Continent to Britannia. The strongest social bond was that of ‘kinship’. Every freeman depended on kinship for protection and association with the proper social class. The amount of ‘*wergild*’ that the kindred could accept in place of ‘vengeance’ was decisive for social acceptance. As Durant (1967, Vol. XI, Chap. 20, pp. 263-265) points out, in this ‘medium state’ national right developed only slowly. However, the Old Germanic law, after some amendments in wording and in application, proved sufficient in its flexibility to be kept in action until the nineteenth hundred century.

As primitive as the law was the economic and private life. The humid climate induced the Anglo-Saxons to heavy food and drink and the beer festival was their concept of a gathering or a holiday like the Angler and Saxons on the continent. It was far less developed than it had been in Britannia of the Romans. The situation changed completely with the Norman Conquest in 1066. As the old chronicle reports, William ordered in 1085 his servants to record everything in the form of ownership, condition and inventory. Every property was measured and registered by his servants. They did their work so thoroughly that not every yard of land, even an ox, a cow, or a pig escaped the entry. The directory became known as the “*Doomsday Book*” (Durant, 1967, Vol 12, Chap. VIII, pp. 167-168).

From this time and onwards, all regional variations of Anglo-Saxon law were replaced by Normanness right, which was retained in the ‘*Tractatus de legibus*’. In the representation of the law and custom, this was no less than a legal revolution. The Norman invasion paved the way for the Old-Franconian procedure of the ‘*Inquisitio*’, which provided the condition for the establishment of a legal system that had the capacity to investigate regional fiscal and judicial affairs, based on an ‘*Iurata*’, which means a group of jurors that had been selected from the citizens of the respective area. By the end of the thirteenth century, the verdict of a jury had replaced the ‘proof’ of the old barbarian law and had laid the ground for the development of a modern (democratic) state. In addition, the first “*De legibus et consuetudinibus Angliae*” had been accomplished (Durant, 1967, Vol. 12, Chap. VIII, pp. 188-192).

References

- Baeyer, H. C., von (1999). Nota bene. From classical chemistry to super-strings, effective notation can shape the very development of a discipline. *The Sciences*, 39 (1), 12-14.
- Bierschenk, B. (1984). Steering mechanisms for knowability. *Cognitive Science Research*, 1. Lund University, Lund, Sweden
- Bierschenk, B. (2001). Geometric foundation and quantification of the flow in a verbal expression. *Cognitive Science Research*, 81. Copenhagen University, Denmark & Lund University, Sweden.
- Bierschenk, B. (2005). The morphogenesis of intention and structural stability of motifs. *Cognitive Science Research*, 96. Copenhagen University, Denmark & Lund University, Sweden.
- Bierschenk, B. (2020). Brehon: Evolution of law in a stateless society. *Cognitive Science Research*, 155. Copenhagen University, Denmark & Lund University, Sweden.
- Bierschenk, B., & Bierschenk, I. (2005). *Shapes of mind. Textual embodiment and thermodynamic description*. Unpublished manuscript.
- Case law. *Wikipedia*, 2019, July 27. https://en.Wikipedia.org/wiki/Case_law
- Central features of the English legal system.
https://www.pravst.unist.hr/dokumenti/dokpdf_engleski_za_pravnike_1_web.pdf
- Changeux, J. P., & Connes, A. (1995). *Conversations on mind, matter and mathematics*. (M. B. DeBevoise Ed., & Trans.) Princeton, NJ: Princeton University Press. (Original work published under the title *Matière à Pensée*, 1989)
- Connes, A. (1994). *Noncommutative geometry*. New York: Academic Press.
- Constantine the Great. (2019, May 17). https://en.Wikipedia.org/wiki/Constantine_the_Great
- Crown Agents. (2019, October 28). Accelerating self-sufficiency & prosperity. United Kingdom. <https://www.crownagents.com/>
- Durant, W. (1967). *Kulturgeschichte der Menschheit*, Vol. X, Chap. 4, pp. 158-159. Editions Rencontre Lausanne.
- Durant, W. (1967). *Kulturgeschichte der Menschheit*, Vol. XI, Chap. 8 and Chap. 20. Editions Rencontre Lausanne.
- Düll, R. (1953). *Das ZwölfTafelGesetz*. Texte, Übersetzungen und Erläuterungen. München: Ernst Heimeran Verlag.
- Dworkin, R. (2007, December 04). Law as integrity. *Law's Empire*, 1986.
<https://theoryofjurisprudence.blogspot.com/2007/12/ronald-dworkin-law-as-integrity.html>
- Ebeling, W., Scharnhorst, A., Montaña, M. A. J., & Karmeshu (1999). Evolution- und Innovationsdynamik als Suchprozess in komplexen adaptiven Landschaften. In K. Mainzer (Ed.), *Komplexe Systeme und Nicht-lineare Dynamik in Natur und Gesellschaft. Komplexitätsforschung in Deutschland auf dem Weg ins nächste Jahrhundert* (pp. 446-473). Heidelberg: Springer-Verlag.
- Fallon, R. H., Jr. (2015, May 15). Greatness in a Lower Federal Court Judge: The Case of J. Skelly Wright. Loyola University of New Orleans: *Law Review*. Free dictionary. Link: [stare decisis](https://legal-dictionary.thefreedictionary.com/stare+decisis) Copyright 2003-2019, Farlex, Inc.
- Greene, B. (1999). *The elegant universe: Superstrings, hidden dimensions, and the quest for the ultimate theory*. New York: W. W. Norton & Company.
- Hestenes, D. (1986/1993). *New foundations for classical mechanics*. Dordrecht: Kluwer Academic. (Original work published 1986)

- Hestenes, D. (1994 a). Invariant body kinematics: I. Saccadic and compensatory eye movements. *Neural Networks*, 7, 65-77.
- Hestenes, D. (1994 b). Invariant body kinematics: II. Reaching and neurogeometry. *Neural Networks*, 7, 79-88.
- Hurtley, S., & Szuromi, P. (2004). This week in Science: A super-fluid solid, *Science*, 305(5692), 1869.
- Law in Ancient Rome. The Twelve Tables. <https://www.crystalinks.com/romelaw.html>
- Law Teacher (2019). The home to academic legal research, resources and legal material. <https://www.lawteacher.net/>
- Porter, T. M. (2004). *Karl Pearson. The scientific life in a statistical age*. Princeton, NJ: Princeton University Press.
- Re, E. D. (1961). The Roman contribution to the Common law, 29 Fordham L Rev. 447. Available at: <http://ir.lawnet.fordham.edu/flr/vol29/iss3/2>.
- Ridley, M. (2003). *Nature via nurture. Genes experience and what makes us human*. New York: HarperCollins.
- Seipp, D. J., Boston University. 5RB: Expert Case Reports and Judgments, © The Inner Temple Library, 2019.
- Wales, D. J. (2003). *Energy landscapes: Applications to clusters, biomolecules and glasses*. Cambridge: Cambridge University Press.

Accepted January 01, 2021

Appendix

Table A1.

Unfolded flow dynamics of English law Epilogue

No	X	Y	Z(A)	Z(O)
1	1	1	3.516800	-41.6766000
2	2	1	3.624687	-34.7596000
3	3	1	4.082000	-30.1784000
4	4	1	3.479604	-20.0658000
5	5	1	1.134396	-10.7627000
6	6	1	-0.83401	0.964500000
7	7	1	10.59750	6.248600000
8	1	2	4.082000	4.553000000
9	2	2	4.082000	5.031000000
10	1	3	5.777600	-6.67521000
11	2	3	3.241824	4.082000000
12	3	3	3.241824	5.418000000
13	4	3	3.241824	5.147100000
14	5	3	3.241824	5.185800000
15	1	4	5.557800	-0.13402000
16	2	4	3.310301	5.526400000
17	1	5	3.579600	-4.32642000
18	2	5	4.427399	3.956400000
19	3	5	3.395861	6.912000000
20	1	6	3.862200	4.144800000
21	2	6	3.534752	4.553000000
22	3	6	3.534752	5.572800000
23	4	6	5.055399	4.553000000
24	1	7	16.62630	7.363300000
25	1	8	4.647200	4.584399999
26	2	8	4.867000	-8.83962000
27	3	8	3.293872	6.138000000
28	4	8	3.293872	5.882400000
29	5	8	3.293872	4.019199999
30	6	8	3.293872	3.830800000
31	7	8	3.293872	4.458800000

Table A2.

Objective Transformation of the English Law

X	Y	Node	Value	Transformation
0	1	D	0	
1	0	7	6.2486	Are not exclusively Anglo-Saxon.
1	1	T₁	6.2486	Mixed Folk-right
2	0	8	4.5530	Is neither virtue
3	0	9	5.0310	In autonomy
3	1	T₂	9.5840	Domain transformation
1	1	T ₁	6.2486	Mixed Folk-right
3	1	T ₂	9.5840	Domain transformation
3	2	T₃	15.8326	Restitution
4	0	11	4.0820	Do violence
5	0	12	5.4180	To the rule
5	1	T₄	9.5000	Law enforcement
6	0	13	5.1471	Of probability

7	0	14	5.1858	In civilization
5	2	T₅	10.3329	Macroevolution
5	1	T ₄	9.5000	Law enforcement
5	2	T ₅	10.3329	Macroevolution
7	2	T₆	19.3329	Accreditation
3	2	T ₃	15.8326	Restitution
7	2	T ₆	19.3329	Accreditation
7	3	T₇	26.1655	Faithfulness
8	0	D	0	
9	0	16	5.5264	Acknowledge a Roman influence.
9	1	T₈	5.5264	Arbitrator
7	3	T ₇	26.1655	Faithfulness
9	1	T ₈	5.5264	Arbitrator
9	3	T₉	31.6919	Resolution
10	0	D	0	
11	0	18	3.9564	Was not
11	1	T₁₀	3.9564	Decree
9	3	T ₉	31.6919	Resolution
11	1	T ₁₀	3.9564	Decree
11	3	T₁₁	35.6483	Decision
12	0	20	4.1448	Nor greatness
13	0	21	4.5530	Is neither virtue
13	1	T₁₂	8.6978	Courage
14	0	22	5.5728	The more objective evaluation
15	0	23	4.5530	Follow him .22'
15	1	T₁₃	10.1258	Integrity
13	1	T ₁₂	8.6978	Courage
15	1	T ₁₃	10.1258	Integrity
15	2	T₁₄	18.8236	Leadership
11	3	T ₁₁	35.6483	Decision
15	2	T ₁₄	18.8236	Leadership
15	3	T₁₅	54.4719	Solidity
16	0	25	4.5844	Shows more clearly
17	0	27	6.1380	In an atmosphere
17	1	T₁₆	10.7224	Strength
15	3	T ₁₅	54.4719	Solidity
17	1	T ₁₆	10.7224	Strength
17	3	T₁₇	65.1943	Support
18	0	D	0	
19	0	24	7.3633	Commencing with Lanfranc
19	1	T₁₈	13.0283	Achievement
17	3	T ₁₇	65.1943	Support
19	1	T ₁₈	13.0283	Achievement
19	3	T₁₉	72.5576	Empowerment
22	4	D	0	
22	5	19	6.9120	Prepared during the Roman occupation
21	5	T₂₀	6.9120	Roman legacy
19	3	T ₁₉	72.5576	Empowerment
21	5	T ₂₀	6.9120	Roman legacy
20	5	T₂₁	78.7496	Roman reigns
18	8	28	5.8824	Of Roman intellectuality
17	8	29	4.0192	Ethical
17	7	T₂₂	9.9016	Excellence
20	5	T ₂₁	78.7496	Roman reigns
17	7	T ₂₂	9.9016	Excellence
17	6	T₂₃	88.6512	Greatness

16	8	30	3.8308	Philosophical
15	8	31	4.4588	And judicial
15	7	T₂₄	8.2896	Stare decisis
17	6	T ₂₃	88.6512	Greatness
15	7	T ₂₄	8.2896	Stare decisis
15	6	T₂₅	96.9408	Case law
14	8	D	0	
13	8	6	0.9645	Show(that the roots of the common law of England+are not exclusively Anglo-Saxon.)
13	7	T₂₆	0.9645	Curia Regis
12	8	D	0	
11	8	15	-0.1340	Would(the more objective evaluation+acknowledge a Roman influence.)
11	7	T₂₇	-0.1340	Responsibility
13	7	T ₂₆	0.9645	Curia Regis
11	7	T ₂₇	-0.1340	Responsibility
11	6	T₂₈	0.8205	Sovereignty
10	8	D	0	
9	8	17	-4.32642	Assuming(that the soil+was not(that the soil+prepared during the Roman occupation))
9	7	T₂₉	-4.32642	Imperator
11	6	T ₂₈	0.8205	Sovereignty
9	7	T ₂₉	-4.32642	Imperator
9	6	T₃₀	-3.5059	Imperial Britain
8	8	D	0	
7	8	10	-6.6752	Would(,and since such a conclusion+do violence+to the rules+of probability+in civilization)
7	7	T₃₁	-6.6752	Impetus
8	6	T ₃₀	-3.5059	Imperial Britain
7	7	T ₃₁	-6.6752	Impetus
7	6	T₃₂	-10.1811	Roman law
6	8	D	0	
7	8	26	-8.8396	Was(how the common law+nurtured+in an atmosphere + of Roman intellectionality+ethical+philosophical and judicial.)
7	7	T₃₃	-8.8396	Aspiration
7	6	T ₃₂	-10.1811	Roman law
7	7	T ₃₃	-8.8396	Aspiration
7	6	T₃₄	-19.0207	Self-confidence
6	8	D	0	
5	8	5	-10.7627	said(that enough+(to(that enough)+(show+(that roots of the common law of England+are not exclusively Anglo-Saxon.)
5	7	T₃₅	-10.7627	Roman subjugation
7	6	T ₃₄	-19.0207	Self-confidence
5	7	T ₃₅	-10.7627	Roman suppression
5	6	T₃₆	-29.7834	Subjection
4	8	D	0	
3	8	4	-20.0658	Been(that enough+said(...)
3	7	T₃₇	-20.0658	Concern
5	6	T ₃₆	-29.7834	Subjection
3	7	T ₃₇	-20.0658	Concern
3	3	T₃₈	-49.8492	Reflection
0	7	D	0	
0	6	3	-30.1784	has(that enough+been(...)
1	6	T₃₉	-30.1784	Competitive strategy
3	3	T ₃₈	-49.8492	Reflection
1	6	T₃₉	-30.1784	Competitive strategy

2	6	T_{40}	-80.0276	Foresight
0	5	D	0	
0	4	2	-34.7596	Hoped(that enough+has(...))
1	4	T_{41}	34.7596	Expectation
2	6	T_{40}	-80.0276	<i>Foresight</i>
1	4	T_{41}	-34.7596	<i>Expectation</i>
2	4	T_{42}	-114.7872	Proprietary
0	3	D	0	
0	2	1	-41.6766	Is(It+hoped(that enough+has(...))
1	2	T_{43}	-41.6766	Dominion
2	4	T_{42}	-114.7872	<i>Proprietary</i>
1	2	T_{43}	-41.6766	<i>Dominion</i>
2	2	T_{44}	-156.4638	Prescription
15	6	T_{25}	96.9408	<i>Case law</i>
2	2	T_{44}	-156.4638	<i>Prescription</i>
2	3	T_{45}	-59.5230	Case management

Table A3.
English_O-term_extraction

X	Y	A-component	O-component	Concepts	Fusion
		<i>Swing</i>	<i>Destination</i>	<i>Extracted</i>	<i>Value</i>
1	1	$T_1: 6 \rightarrow 5$	T_{036}	Subjection	1.134396
3	1	$T_2: 1 \rightarrow 2$	T_{041}	Expectation	7.141487
3	2	$T_3: T_{A2} \rightarrow T_{A1}$	T_{03}	Restitution	15.8326
5	1	$T_4: 4 \rightarrow 5$	T_{037}	Concern	7.561604
5	2	$T_5: T_{A4} \rightarrow T_{A3}$	T_{07}	Faithfulness	15.003177
6	1	$T_6: 8 \rightarrow 9$	T_{02}	Domain transformation	8.1640
7	2	$T_7: T_{A6} \rightarrow T_{A5}$	T_{07}	Faithfulness	23.7177
9	1	$T_8: D \rightarrow 10$	T_{031}	Impetus	5.7776
9	2	$T_9: T_{A8} \rightarrow T_{A7}$	T_{09}	Resolution	28.944777
11	1	$T_{10}: 11 \rightarrow 12$	T_{04}	Law enforcement	6.483648
13	1	$T_{12}: 13 \rightarrow 14$	T_{05}	Macroevolution	6.483648
13	2	$T_{11}: T_{A11} \rightarrow T_{A10}$	T_{010}	Decree	12.7296
13	3	$T_{13}: T_{A12} \rightarrow T_{A9}$	T_{011}	Decision	41.912073
15	1	$T_{14}: D \rightarrow 15$	T_{027}	Responsibility	5.5578
15	2	$T_{15}: T_{A14} \rightarrow T_{A13}$	T_{013}	Integrity	47.469873
17	1	$T_{16}: D \rightarrow 16$	T_{08}	Arbitrator	3.310301
17	3	$T_{17}: T_{A16} \rightarrow T_{A15}$	T_{017}	Support	50.780174
19	2	$T_{18}: 17 \rightarrow 18$	T_{010}	Decree	8.006999
21	1	$T_{19}: D \rightarrow 19$	T_{020}	Roman legacy	3.395861
21	2	$T_{20}: T_{A19} \rightarrow T_{A18}$	T_{018}	Achievement	11.40286
21	3	$T_{21}: T_{A20} \rightarrow T_{A17}$	T_{019}	Empowerment	62.183034
16	7	$T_{22}: 20 \rightarrow 21$	T_{017}	Support	7.396952
14	7	$T_{23}: 22 \rightarrow 23$	T_{013}	Integrity	8.590159
14	6	$T_{24}: T_{A23} \rightarrow T_{A22}$	T_{022}	Excellence	15.987103
14	5	$T_{25}: T_{A24} \rightarrow T_{A21}$	T_{025}	Case law	78.170137
11	7	$T_{26}: 25 \rightarrow 26$	T_{027}	Responsibility	9.5142
9	7	$T_{27}: 27 \rightarrow 28$	T_{028}	Sovereignty	6.587744
9	6	$T_{28}: T_{A27} \rightarrow T_{A26}$	T_{028}	Sovereignty	16.101944
7	7	$T_{29}: 29 \rightarrow 30$	T_{024}	Stare decisis	6.587744
7	6	$T_{30}: T_{A29} \rightarrow T_{A28}$	T_{030}	Imperial Britain	22.689688
5	7	$T_{31}: D \rightarrow 31$	T_{024}	Stare decisis	3.293872
5	6	$T_{32}: T_{A31} \rightarrow T_{A30}$	T_{032}	Roman law	25.98356

5	5	$T_{33}: T_{A32} \rightarrow T_{A25}$	To_{45}	Case management	104.153647
1	6	$T_{34}: D \rightarrow 7$	To_1	Mixed Folk-right	10.5975
4	5	$T_{35}: T_{A34} \rightarrow T_{A33}$	To_{33}	Aspiration	114.751197
1	4	$T_{36}: D \rightarrow 24$	To_{18}	Achievement	16.6263
2	4	$T_{37}: T_{A36} \rightarrow T_{A35}$	To_{35}	Roman subjugation	131.377497